

Beehive-1 Exploration Well

Information Flyer #1

15 September 2021



EOG Resources Inc (EOG) is planning to drill the Beehive-1 exploration well ('the project') in Exploration Permit WA-488-P in the Joseph Bonaparte Gulf in Western Australia (WA) (Figure 1, over page).

Why We're Consulting You

EOG has identified you, your group, organisation or company as a 'relevant person', defined under the Offshore Petroleum and Greenhouse Gas (Environment) Regulations 2009 as someone whose *functions* (power, duty, authority or responsibility), *activities* (things you do or have done) or *interests* (your rights, advantages, duties and liabilities, or concerns) may be affected by the project. Relevant persons typically include Commonwealth, State and Territory government agencies, commercial and recreational fisheries, asset owners and environment groups.

This information flyer aims to introduce you to EOG and provide information about the project and invites you to submit questions or concerns about the project. This process will assist to inform the preparation of the project's Environment Plans (EPs), which are currently in preparation for regulatory submission.

Who is EOG?

EOG is one of the largest independent crude oil and natural gas exploration and production companies in the United States of America (USA).

EOG is in the process of acquiring the WA-488-P exploration permit from Finniss Offshore Exploration Pty Ltd, which is expected to complete in September or October 2021. EOG has operated offshore since 1992, with a history of nearly 30 years in Trinidad & Tobago, the UK North Sea and the USA Gulf of Mexico.

In the past 10 years, EOG has drilled nearly 40

offshore wells, with an excellent safety and environment record.

The Project

EOG aims to explore a known hydrocarbon prospect in WA-488-P located in the Bonaparte Basin. The project is divided into two phases; geophysical and geotechnical (G&G) investigations, followed by drilling.

This information flyer is focused on the first phase of work, the G&G investigations. Additional information flyers will be issued as the project progresses.

Geophysical and Geotechnical Investigations

The G&G investigations are planned to commence any time between the start of February and end of June 2022 (contingent on the receipt of EP acceptance, vessel and equipment availability). They will be undertaken within a 440 km² envelope, which is located 163 km from the nearest WA shoreline and 73 km from the nearest Northern Territory (NT) shoreline. Water depths in the project area range from 40 m to 50 m.

The G&G investigations (Figure 2) collect seabed and shallow geological information to inform the safe location of a jack-up drilling rig. The G&G investigations are divided into two phases, as outlined here.

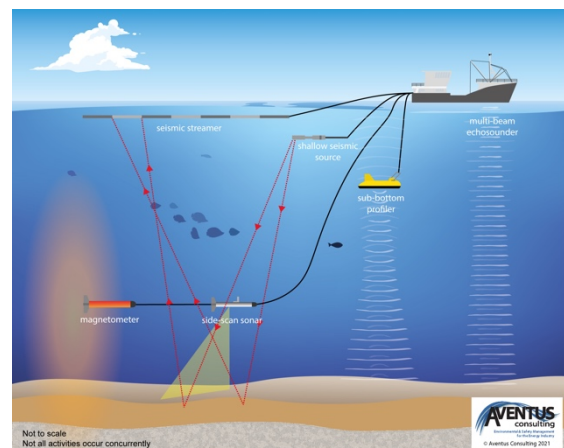


Figure 2. Geophysical investigations

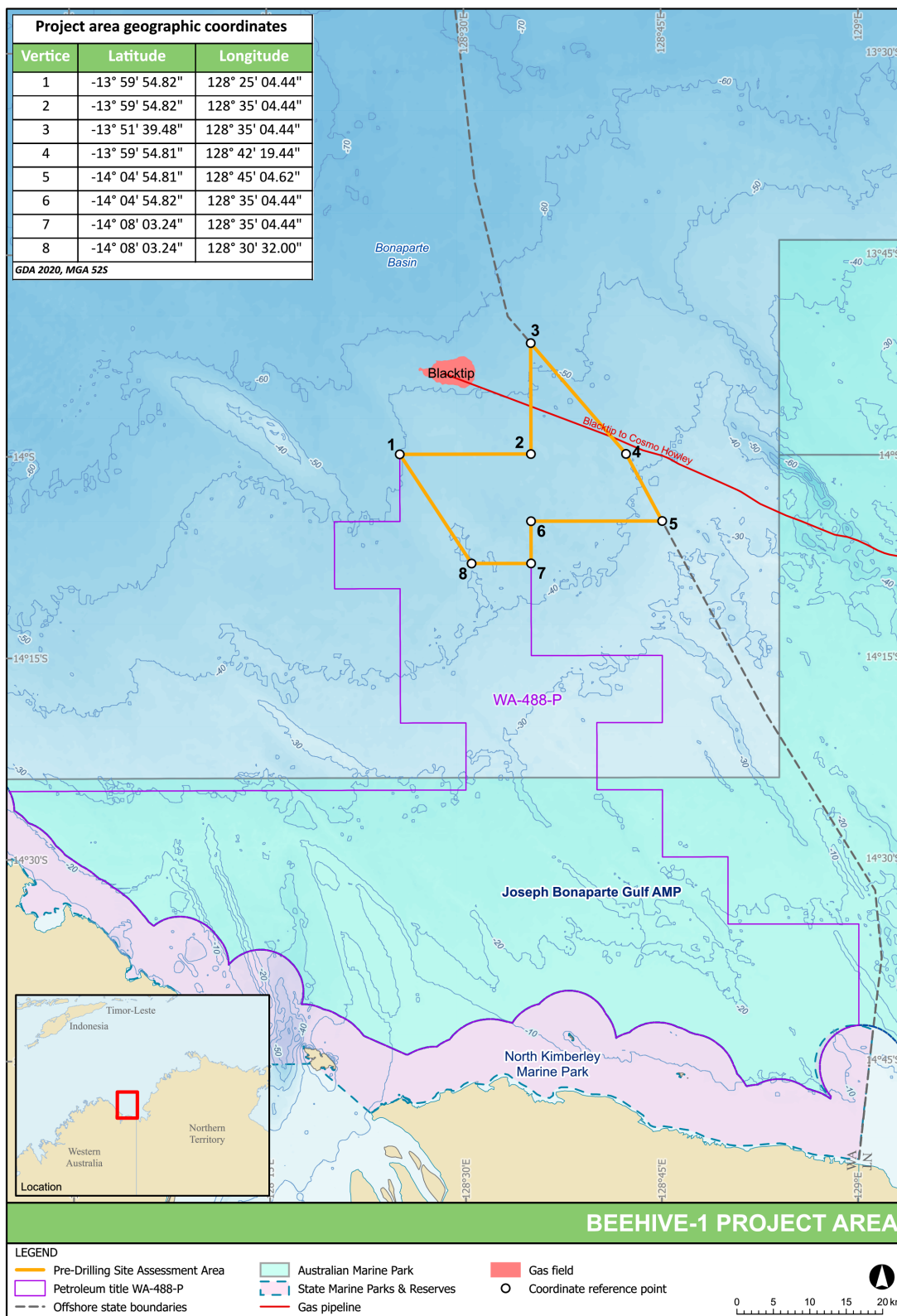


Figure 1. Beehive-1 project area

Geophysical investigations involve the following suite of tests:

- Assess water depths (bathymetry) – using a multi-beam echo sounder (MBES).
- Detect seabed hazards such as pipelines, shipwrecks, reefs and anchors – using a side scan sonar (SSS).
- Map the structure and thickness of uppermost seabed sediments (shallow geology) – using a sub-bottom profiler (SBP).
- Detect metallic objects on or below the seabed, such as cables, anchors, chains, buried pipelines – using a magnetometer.
- Map the near-surface geological hazards, such as shallow gas pockets – using a mini-airgun or sparker system.

The geophysical activities are likely to be conducted using a small, locally-based vessel (as depicted in Figure 2) and is likely to take up to two weeks to complete.

Geotechnical investigations acquire physical measurements and samples of the local shallow geology at and around the potential drill location, using the following techniques:

- Geological analysis of unconsolidated seabed sediments – using grab sampling.
- Geological analysis of formations below the seabed – using coring.
- Determine seabed strength – using piezo cone penetrometer testing (PCPT) and borehole sampling.

The geotechnical investigations are undertaken using a specialised medium-sized vessel, as depicted in Figure 3, and is likely to take up to two weeks to complete. This may be the same vessel as that used to undertake the geophysical investigations.

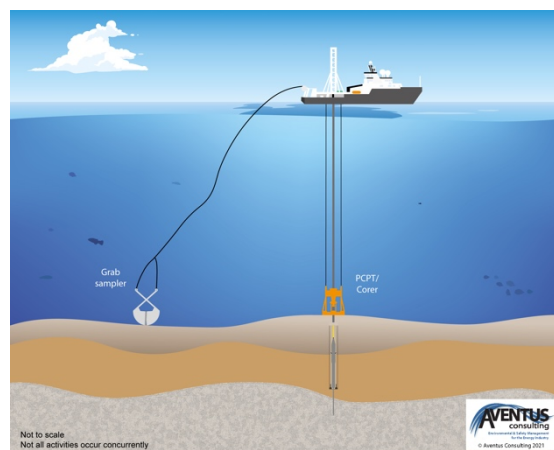


Figure 3. Geotechnical investigations

Drilling

Planning for the drilling campaign is underway. The Beehive-1 well is targeting the Sunbird Formation and anticipates the presence of a light oil or gas condensate.

A jack-up drill rig will drill the well vertically to a depth of about 5,000 m using a water-based mud system, which will take 40-50 days. In the event that hydrocarbons are discovered, well testing (that involves flaring) may take place.

It is anticipated that drilling may commence as early as Q3 2022 (contingent on the receipt of EP acceptance, vessel and equipment availability), but ideally no later than Q2 2023. Further details about the drilling campaign will be provided in future information flyers as planning progresses.

Environment Plans

Preparation of a G&G Investigations EP and a Drilling EP are underway. These will be submitted to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for assessment.

The full EPs will be made available on NOPSEMA's website for public exhibition prior to formal assessment by NOPSEMA.

An EP is a comprehensive document that describes the project, outlines stakeholder feedback, details the existing marine and socio-economic environment, describes and assesses impacts and risks and outlines the

control measures to avoid, minimise and mitigate environmental impacts and risks to be acceptable and ALARP (As Low As Reasonably Practicable).

The project will be subject to industry best practice standards and undertaken in accordance with all relevant environmental and safety legislation and regulations.

Features of the Project Area

Features in the project area include:

- Dominated by the Indonesian Throughflow current and strong tides.
- A seabed dominated by flat featureless plains comprising sand and gravel, with localised reefs and outcrops supporting sponge gardens. The G&G investigations will provide more detail about the type of seabed in the project area. The plains contain diverse infaunal communities (e.g., crustaceans and polychaete worms).
- Seasonal presence or likely presence of threatened migratory species including turtles, sharks, sawfish, whales, dolphins and seabirds.
- Low-intensity commercial fishing by the Commonwealth-managed Northern Prawn Fishery (the project area has a 0.06% overlap with the fishery).
- Some commercial fishing by the WA-managed Northern Demersal Scalefish Managed Fishery (mostly goldband snapper and red emperor) and Mackerel Managed Fishery.
- An absence of NT-managed commercial fisheries.
- An absence of known shipwrecks.
- Low commercial shipping traffic.
- An overlap by the Department of Defence North Australian Exercise Area.

Distances from the project area to the following features are:

- The Carbonate bank and terrace system of the Sahul Shelf Key Ecological Feature (KEF) – 13 km.
- The Blacktip unmanned wellhead platform – 13 km.
- Joseph Bonaparte Australian Marine Park (AMP) – 16 km.
- WA North Kimberley Marine Park – 50 km.

A summary of key impacts and risks of the G&G investigations is presented in the following pages.

How to Provide Feedback

EOG encourages you to ask questions or provide feedback on the project using the following contact details:

Email: australia@eogresources.com

Phone: 0409 772 170

EOG will respond to feedback in a timely fashion.

Background project information (and this information flyer) is also available on the EOG website at:

<https://www.eogresources.com/australia>

Ongoing Consultation

Consultation with relevant persons will be ongoing throughout the project planning phase, with additional information flyers to be distributed at various milestones.

Preliminary environmental impact and risk assessment for the Beehive-1 geophysical and geotechnical investigations (WA-488-P)

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
<i>Planned events</i>		
Generation of underwater sound from G&G investigations and vessels	Temporary disruption to migration, feeding or breeding patterns for sound-sensitive fauna, such as cetaceans (whales and dolphins).	<ul style="list-style-type: none"> In accordance with the EPBC Act Policy Statement 3.1, a 500-m shutdown zone will be maintained during operation of the geophysical equipment to minimise impacts on cetaceans. Vessel engines and thrusters will be maintained in accordance with planned maintenance system to ensure they are operating efficiently.
	Damage to the Blacktip gas pipeline from sound pulses.	<ul style="list-style-type: none"> Shallow gas investigations, using a mini-airgun or sparker system, will not be undertaken over the pipeline.
Seabed disturbance from geotechnical activities	Temporary and localised seabed turbidity. Smothering of seabed habitat by disturbed sediments.	<ul style="list-style-type: none"> The vessel will not anchor during geotechnical investigations (it will remain on location using dynamic positioning). Very low volumes of cuttings and drilling fluids will be discharged during borehole sampling. Seabed grab sampling and coring activities are extremely localised. Cored holes are very narrow and will collapse in on themselves and small surface 'craters' will quickly fill in with sediments and recolonise with benthic fauna. Large bulky items will be securely fastened or stored on the vessel deck to prevent loss to sea. Any dropped objects will be recovered (where safe to do so).
<i>Routine vessel discharges and emissions</i>		
Atmospheric emissions	Temporary reduction in air quality in the local air shed.	<ul style="list-style-type: none"> Vessels >400 gross tonnes will have in place a current International Air Pollution Prevention (IAPP) certificate and Ship Energy Efficiency Management Plan (SEEMP). Only marine-grade low sulphur diesel (no greater than 0.5% m/m) will be used. Waste incineration will not take place. All fuel-burning equipment will be maintained in accordance with planned maintenance systems.
Light glow	Attractant to fauna, temporary increase in predation rates on fauna attracted to lights.	<ul style="list-style-type: none"> Vessel lighting will be kept to the minimum required but in accordance with navigational standards and personnel safety requirements for night-time work.

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
Discharge of treated sewage and grey water	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Sewage and grey water will be treated in a MARPOL Annex IV-compliant sewage treatment plant prior to discharge (or taken back to port for disposal). • Vessels >400 gross tonnes will have in place a current International Sewage Pollution Prevention (ISPP) certificate. • In the event of a sewage treatment plant malfunction, untreated sewage will only be discharged when > 12 nm from shore or will be offloaded onshore for treatment.
Discharge of cooling water and reverse osmosis (brine)	Temporary and localised elevation in surface water temperature and salinity levels.	<ul style="list-style-type: none"> • Low impact biocides (chlorine) are used in optimised concentrations in the cooling system. • Engines and associated equipment that require cooling by water will be maintained in accordance with the planned maintenance system so that they are operating within accepted parameters. • Only low-toxicity chemicals (ONCS 'Gold'/'Silver' (CHARM) or 'D'/'E' (non-CHARM)-rated) chemicals are used in the cooling and brine water systems.
Discharge of putrescible waste	Temporary and localised increase in nutrient content of surface and near-surface water quality. Temporary increase in scavenging behaviour of pelagic fish and seabirds.	<ul style="list-style-type: none"> • Putrescible waste will be macerated to <25 mm prior to discharge (or taken back to shore for disposal). • In the event of macerator malfunction, un-macerated putrescible waste will take place will be discharged when >12 nm of land or returned to shore. • Non-putrescible galley waste will be returned to shore for disposal.
Discharge of bilge water and deck drainage	Temporary and localised reduction in water quality.	<ul style="list-style-type: none"> • Vessels >400 gross tonnes will have in place a MARPOL Annex I-compliant oily water separator set to limit oil-in-water content to <15 ppm prior to discharge. • Vessels >400 gross tonnes will have a current International Oil Pollution Prevention (IOPP) certificate. • No whole residual bilge oil is discharged overboard (residual oil from the oily water separator is pumped to tanks and disposed of onshore). • Chemical storage areas will be bunded and drain to the bilge tank. • Portable bunds and/or drip trays are used to collect spills or leaks from equipment that is not contained within a permanently bunded area (non-process areas). • Deck cleaning detergents will be biodegradable. • Spills to decks will be cleaned immediately using Shipboard Marine Pollution Emergency Plan (SMPEP) kits.
<i>Unplanned events</i>		
Accidental overboard release of hazardous	Marine pollution (litter and a temporary and localised reduction in	<ul style="list-style-type: none"> • Vessels >100 gross tonnes or certified to carry more than 15 people will have in place and implement a vessel-specific Garbage Management Plan. • Vessel crew and visitors will be inducted into the waste

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
and/or non-hazardous waste from the vessels	water quality). Injury and entanglement of individual animals (such as seabirds and turtles) and smothering or pollution of benthic habitats.	<p>management procedures.</p> <ul style="list-style-type: none"> • A waste manifest will be maintained. • Only small volumes of chemicals will be kept on board and will be stored in secured drums in banded areas away from open drains. • Banded areas will drain through a closed system, processed through the oily water separator. • Safety Data Sheets (SDS) will be available in appropriate locations. • SMPEP kits will be available on board for rapid deck clean-up response.
Introduction of invasive marine species from the vessel hulls and/or ballast water	Reduction in native marine species diversity and abundance. Displacement of native marine species. Socio-economic impacts on commercial fisheries. Reduction of conservation values of protected areas.	<ul style="list-style-type: none"> • Vessels will carry a low risk of invasive marine species introduction (as determined through a vessel contractor pre-qualification report). • Vessels >400 gross tonnes will carry a current International Anti-fouling System (IAFS) Certificate and comply with Marine Order Part 98 (Anti-fouling Systems). • The vessel/s will comply with the: <ul style="list-style-type: none"> ○ Australian Ballast Water Management Requirements (DAWR, 2020); and ○ National Biofouling Guidance for the Petroleum Production & Exploration Industry (AQIS, 2009). • Towed/submersible equipment will be cleaned (e.g., fouling is removed) prior to initial use in the project area.
Damage to Blacktip subsea gas pipeline (e.g., dropped objects, anchoring)	Loss of pipeline integrity and lost field production.	<ul style="list-style-type: none"> • Vessel anchoring will not be permitted. • EOG will consult with ENI Australia (pipeline operator) to understand the implications of operating over the pipeline. • The geophysical investigations will be undertaken prior to geotechnical investigations in order to accurately locate the pipeline and put in place geotechnical exclusion buffer around it. • EOG will ensure that the geotechnical vessel contractor has the coordinates of the Blacktip pipeline marked in its navigation system (confirmed during the geophysical survey) to ensure that no geotechnical work is conducted within a nominated buffer around the pipeline.
Vessel strike or entanglement with megafauna (e.g., whales, dolphins, turtles)	Injury or death of individual animals.	<ul style="list-style-type: none"> • The Australian Guidelines for Whale and Dolphin Watching (DEWHA, 2005) for sea-faring activities will be implemented, which includes caution and no-approach zones around whales and dolphins. • Vessel strike causing injury to or death of a cetacean is reported via the online National Ship Strike Database within 72 hours of the incident. • Entanglement of megafauna in towed equipment is reported to the NT Marine Wildwatch on 1800 453 941 (or WA's Wildcare on 08-9474 9055) as soon as possible. No attempts to disentangle megafauna will be made by project personnel unless instructed

Hazard	Potential impacts & risks	Avoidance, management and mitigation measures
		<p>by Wildwatch or Wildcare.</p> <ul style="list-style-type: none"> • Vessel crew will complete an environmental induction covering the above-listed requirements.
Displacement of or interference with third-party vessels	<p>Temporary loss of fishing grounds around the vessel safety zone.</p> <p>Trawling gear snagging on towed or submerged equipment.</p>	<ul style="list-style-type: none"> • The project area is located in an area with low levels of shipping traffic and low fishing effort. • A 'Notice to Mariners' will be issued. • Standard maritime safety precautions will be in place, including: <ul style="list-style-type: none"> ○ Radar and other anti-collision monitoring equipment to detect other vessels. ○ Display of lights and day shapes. ○ The ability to quickly move off location to avoid other vessels. ○ Warnings issued (radio, flares, lights and horns) to avoid collisions. ○ The Vessel Master will be qualified in accordance with AMSA Marine Orders Part 3 (Seagoing qualifications) (e.g., International Convention of Standards of Watchkeeping for Seafarers, STCW95, GMDSS Proficiency). • The tail buoy on the shallow seismic streamer will have flashing lights and radar reflectors so it is visible to other marine users. • The vessel master will sound the general alarm, manoeuvre the vessel to minimise the effects of the collision and implement all other measures as outlined in the vessel collision procedure. • Vessel collisions will be reported to AMSA if that collision has or is likely to affect the safety, operation or seaworthiness of the vessel or involves serious injury to personnel.
Diesel release due to a vessel-to-vessel collision	<p>Temporary and localised reduction in water quality.</p> <p>Tainting of commercial fisheries species.</p> <p>Injury and/or death of marine fauna and seabirds.</p> <p>Pathological effects on fish larvae and plankton.</p>	<ul style="list-style-type: none"> • <i>As per 'displacement of or interference with third-party vessels', plus:</i> • No refuelling will take place on location. • Vessel crew will be trained in spill response techniques in accordance with the SMPEP and vessel training matrix. • Diesel spill trajectory modelling indicates a very small area of ecological impact in the event of the loss of a whole tank of fuel. • An Oil Pollution Emergency Plan (OPEP) will be developed based on the spill modelling results. • Vessel-specific SMPEP and project-specific OPEP will be implemented in the event of a large spill. • EOG will report the spill to regulatory authorities within 2 hours of becoming aware of the spill.